

REMARKS

Applicants appreciate the Examiner's thorough consideration provided the present application. Claims 1, 3, 5-34, 36-38 and 44-46 are present in the application. Claim 1 has been amended. Claims 39 has been incorporated in claim 1 and hereby cancelled. Claim 1 is independent. Reconsideration of this application, as amended, is respectfully requested.

Allowable Subject Matter

The Examiner has indicated that dependent claim 39 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. Applicants greatly appreciate the indication of allowable subject matter by the Examiner.

By the present amendment, independent claim 1 has been amended to include the subject matter of allowable dependent claim 39, as discussed hereinbelow.

Drawings Objections

The drawings have been objected to due to the lack of a legend in FIGs. 4-10 such as "Prior Art." Applicants respectfully disagree.

In particular, although Boolean Decision Diagram (BDD) is well known, *using the BDD to represent the rules in a Directed Acyclic Graph (DAG) to configure an apparatus is not well known in the art.* Although the specification discloses that BDD has a well known graphical representation and Figure 5 is an example of the graphical representation, this does not mean that Figure 5 is prior art. In particular, the specification on page 16, lines 3-4 and page 30, lines 12-15 discloses:

In Annex B, *preferred embodiments* are given for a number of algorithms:

Algorithm 1: Basic BDD operations.

....

BDDs has a well known graphically representation. Figure 5 is an example of this representation. The figure is a BDD over two variables X_0 and X_1 . *The chosen ordering \leq of the variables is $X_0 \leq X_1$ and the BDD represents the formula:*

$$X_0 \rightarrow ((X_1 \rightarrow 0, 1), 1) = (\neg X_0) \vee (\neg X_1)$$

Basic operations on BDDs for the construction and decomposition of BDDs are sketched in Algorithm 1.... (Emphasis added.)

In other words, the formula is *chosen by Applicants* to exemplify a BDD *representing the domain constraints*. Although the BDD has a well known graphical representation, the actual graphical representation is determined *based on the rules set by the users*. Therefore, different users can set different rules to obtain different graphical representations.

Here, Figure 5 is an example to exemplify a BDD *representing the domain constraints set by Applicants*, which is not known in the art. Similarly, as disclosed on page 15, lines 20-30 of the specification, FIG. 4 shows a PC Example, exemplifying a BDD *representing the third rule set by Applicants*; FIG. 5 shows another PC Example, exemplifying a BDD *representing the domain constraints set by Applicants*; FIG. 6 shows another PC Example, exemplifying a BDD *representing the rules set by Applicants*; FIG. 7 shows another PC Example, exemplifying a BDD *representing the rules and the domain constraints with both public and private variables set by Applicants*; FIG. 8 shows another PC Example, exemplifying the virtual table with a BDD *representing the rules and the domain constraints set by Applicants*, and with only the public variables included; FIG. 9 shows another PC Example, exemplifying a BDD *representing consistent configurations under the selection of the Seagate-Barracuda-9-9, 1 GB harddisk*; FIG.

10 shows show another PC Example, exemplifying *the virtual table where all variables except $X0$ and $X1$ is existentially quantified out*. In other words, FIGs. 4-10 of the present application applying different rules set by Applicants to the BDD to generate different graphical representations *embedded with different rules for configuring an apparatus*, which are clearly not prior art as the Examiner alleged.

Accordingly, reconsideration and withdrawal of this objection are respectfully requested.

Claim Rejections Under 35 U.S.C. § 101

Claims 1-3, 5-39, 44 and 45 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. This rejection is respectfully traversed.

The Examiner alleged that the limitations of the claims are directed to an abstract idea and that there is no physical transformation. Applicants respectfully disagree.

In particular, claim 1 recites “[a] method of configuring an apparatus comprising a number of *components*, the method comprising: providing, for each component, information relating to *a group of alternatives for the component*,...thereby *the apparatus being configured using all of the selected alternatives for all of the components*....” In other words, a group of alternatives of a plurality of components are provided to be selected according to the rules of the claimed method, and finally an apparatus is configured using the selected alternatives for all of the components. Therefore, a physical transformation of a plurality of articles (a group of alternatives of a plurality of components) to a different state (i.e., an apparatus) is performed in claim 1. Accordingly, claim 1 and its dependent claims are directed to a statutory process because they fully meet the “machine-or-transformation test” adopted by a recent decision of the

because they fully meet the “machine-or-transformation test” adopted by a recent decision of the Federal Circuit Court of Appeals. *In re Bilski*, 545 F.3d 943, 88 U.S.P.Q.2d 1385 (Fed. Cir. 2008)(en banc). Accordingly, Applicants respectfully submit that this rejection has been obviated and/or rendered moot. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-3, 5-34, 36-38 and 44-46 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lynch, U.S. Patent No. 5,515,524 in view of Peltonen, “An Object for Evolutionary Configuration Management”, and further in view of Applicants’ own disclosure. This rejection is respectfully traversed.

As mentioned, independent claim 1 has been amended to include the subject matter of dependent claim 39, which was indicated by the Examiner as including allowable subject matter. Accordingly, it is believed that claim 1 and its dependent claims are in condition for allowance.

Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103 are respectfully requested.

In addition, Applicants reserve the right to file a Continuation application directed to the rejected claims and the other subject matter not covered by the allowed claims at a later date, if so desired.

CONCLUSION

Since the remaining patents cited by the Examiner have not been utilized to reject the claims, but merely to show the state of the prior art, no further comments are necessary with respect thereto.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

In the event there are any matters remaining in this application, the Examiner is invited to contact Cheng-Kang (Greg) Hsu, Registration No. 61,007 at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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